

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/614,221

DATE: 11/13/2001

TIME: 14:08:32

Input Set : A:\Sequence Listing for 05686.0004.NPUS00.txt

Output Set: N:\CRF3\11132001\I614221.raw

2 <110> APPLICANT: Karunanandaa, Balasulojini
 3 Yu, Jaehyuk
 4 Kishore, Ganesh M.
 6 <120> TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED
 7 WITH STEROL SYNTHESIS AND METABOLISM
 9 <130> FILE REFERENCE: 05686.0004.NPUS00
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/614,221
 C--> 11 <141> CURRENT FILING DATE: 2000-07-11
 11 <150> PRIOR APPLICATION NUMBER: US 60/142,981
 12 <151> PRIOR FILING DATE: 1999-07-12
 14 <160> NUMBER OF SEQ ID NOS: 626

ERRORED SEQUENCES

41863 <210> SEQ ID NO: 626
 41864 <211> LENGTH: 434
 41865 <212> TYPE: PRT
 41866 <213> ORGANISM: Saccharomyces cerevisiae
 41868 <400> SEQUENCE: 626
 41870 Met Ser Gln His Ala Ser Ser Ser Trp Thr Ser Phe Leu Lys Ser
 41871 1 5 10 15
 41873 Ile Ser Ser Phe Asn Gly Asp Leu Ser Ser Leu Ser Ala Pro Pro Phe
 41874 20 25 30
 41876 Ile Leu Ser Pro Thr Ser Leu Thr Glu Phe Ser Gln Tyr Trp Ala Glu
 41877 35 40 45
 41879 His Pro Ala Leu Phe Leu Glu Pro Ser Leu Ile Asp Gly Glu Asn Tyr
 41880 50 55 60
 41882 Lys Asp His Cys Pro Phe Asp Pro Asn Val Glu Ser Lys Glu Val Ala
 41883 65 70 75 80
 41885 Gln Met Leu Ala Val Val Arg Trp Phe Ile Ser Thr Leu Arg Ser Gln
 41886 85 90 95
 41888 Tyr Cys Ser Arg Ser Glu Ser Met Gly Ser Glu Lys Lys Pro Leu Asn
 41889 100 105 110
 41891 Pro Phe Leu Gly Glu Val Phe Val Gly Lys Trp Lys Asn Asp Glu His
 41892 115 120 125
 41894 Pro Glu Phe Gly Glu Thr Val Leu Leu Ser Glu Gln Val Ser His His
 41895 130 135 140
 41897 Pro Pro Met Thr Ala Phe Ser Ile Phe Asn Glu Lys Asn Asp Val Ser
 41898 145 150 155 160
 41900 Val Gln Gly Tyr Asn Gln Ile Lys Thr Gly Phe Thr Lys Thr Leu Thr
 41901 165 170 175
 41903 Leu Thr Val Lys Pro Tyr Gly His Val Ile Leu Lys Ile Lys Asp Glu
 41904 180 185 190
 41906 Thr Tyr Leu Ile Thr Thr Pro Pro Leu His Ile Glu Gly Ile Leu Val
 41907 195 200 205
 41909 Ala Ser Pro Phe Val Glu Leu Gly Gly Arg Ser Phe Ile Gln Ser Ser

Edit
114221.raw
sequence

RAW SEQUENCE LISTING

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```

41910      210      215      220
41912 Asn Gly Met Leu Cys Val Ile Glu Phe Ser Gly Arg Gly Tyr Phe Thr
41913 225      230      235      240
41915 Gly Lys Lys Asn Ser Phe Lys Ala Arg Ile Tyr Arg Ser Pro Gln Glu
41916      245      250      255
41918 His Ser His Lys Glu Asn Ala Leu Tyr Leu Ile Ser Gly Gln Trp Ser
41919      260      265      270
41921 Gly Val Ser Thr Ile Ile Lys Lys Asp Ser Gln Val Ser His Gln Phe
41922      275      280      285
41924 Tyr Asp Ser Ser Glu Thr Pro Thr Glu His Leu Leu Val Lys Pro Ile
41925      290      295      300
41927 Glu Glu Gln His Pro Leu Glu Ser Arg Arg Ala Trp Lys Asp Val Ala
41928 305      310      315      320
41930 Glu Ala Ile Arg Gln Gly Asn Ile Ser Met Ile Lys Lys Thr Lys Glu
41931      325      330      335
41933 Glu Leu Glu Asn Lys Gln Arg Ala Leu Arg Glu Gln Glu Arg Val Lys
41934      340      345      350
41936 Gly Val Glu Trp Gln Arg Arg Trp Phe Lys Gln Val Asp Tyr Met Asn
41937      355      360      365
41939 Glu Asn Thr Ser Asn Asp Val Glu Lys Ala Ser Glu Asp Asp Ala Phe
41940      370      375      380
41942 Arg Lys Leu Ala Ser Lys Leu Gln Leu Ser Val Lys Asn Val Pro Ser
41943 385      390      395      400
41945 Gly Thr Leu Ile Gly Gly Lys Asp Asp Lys Lys Asp Val Ser Thr Ala
41946      405      410      415
41948 Leu His Trp Arg Phe Asp Lys Asn Leu Trp Met Arg Glu Asn Glu Ile
41949      420      425      430
41951 Thr Ile

```

E--> 41954 2
E--> 41957 2

*Delete End of file contents
- Check sequence logos for fields
221 and 222 at unknown*

VERIFICATION SUMMARY

DATE: 11/13/2001

PATENT APPLICATION: US/09/614,221

TIME: 14:08:39

Input Set : A:\Sequence Listing for 05686.0004.NPUS00.txt

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L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:644 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:644 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:644 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:646 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:646 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:646 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:648 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:648 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:661 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:661 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:661 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:663 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:663 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:665 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:665 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:665 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:667 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:667 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:667 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:718 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:11
L:718 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:11
L:718 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:757 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:13
L:757 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:13
L:757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:763 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:13
L:763 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:13
L:763 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:778 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:14
L:778 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:14
L:778 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:788 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:14
L:788 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:14
L:788 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:809 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:15
L:809 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:15
L:809 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:844 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:17
L:844 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:17
L:844 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:846 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:17
L:846 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:17
L:846 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:923 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:21

VERIFICATION SUMMARY

DATE: 11/13/2001

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Input Set : A:\Sequence Listing for 05686.0004.NPUS00.txt

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L:923 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:21
L:923 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:992 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24
L:992 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24
L:992 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:994 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24
L:994 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24
L:994 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:996 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24
L:996 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24
L:996 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:998 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24
L:998 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24
L:998 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:1013 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:25
L:1013 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:25
L:1013 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:1015 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:25
L:1015 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:25
L:1015 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:1017 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:25
L:1017 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:25
L:1017 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:1019 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:25
L:1019 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:25
L:1019 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:1032 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:26
L:1032 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:26
L:1032 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:1034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:1042 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:1057 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1061 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1065 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1067 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1080 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1088 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1090 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1092 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1094 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1096 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:1111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:1113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:41954 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:626
M:332 Repeated in SeqNo=626

STATISTICS SUMMARY

PATENT APPLICATION: US/09/614,221

DATE: 11/13/2001

TIME: 14:08:39

Input Set : A:\Sequence Listing for 05686.0004.NPUS00.txt

Output Set: N:\CRF3\11132001\I614221.raw

Application Serial Number: US/09/614,221

Alpha or Numeric: Numeric

Application Class:

Application File Date: 07-11-2000

Art Unit: OIPE

Software Application:

Total Number of Sequences: 626

Total Nucleotides: 1068424

Total Amino Acids: 1861

Number of Errors: 2

Number of Warnings: 123

Number of Corrections: 2

MESSAGE SUMMARY

258 W: 82 (Mandatory Feature missing)

270 C: 1 (Current Application Number differs)

271 C: 1 (Current Filing Date differs)

332 E: 2 ((32) Invalid/Missing Amino Acid Numbering)

341 W: 41 ((46) "n" or "Xaa" used)

Serial Number: 09/614221

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number input applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading; applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

*Examiner: The above corrections must be communicated to the applicant in the first C
Action. DO NOT send a copy of this form.